In the Claims

1. (Currently amended) A system for optimizing a request-promise workflow between a first entity and a second entity downstream from the first entity, the first entity supplying supplies to the second entity in response to demand for supplies from the second entity, the system being associated with the second entity and comprising one or more processing units and one or more memory units collectively operable to:

establish a demand at the second entity for one or more supplies supplied by the first entity, the demand for the supplies based at least in part on a demand placed on the second entity by a third entity downstream from the second entity;

optimize at the second entity the second entity's production associated with meeting the demand from the third entity to generate the request for the supplies;

communicate the request for the supplies from the second entity to the first entity, a system associated with the first entity operable to optimize the first entity's production of the supplies using the request for the supplies as a first constraint to generate a promise for the supplies based on the request for the supplies;

receive at the second entity the promise for the supplies from the first entity, the promise for the supplies having been generated according to an optimization of the first entity's production of the supplies using the request for the supplies as a first constraint, the promise for the supplies identifying a culprit as a cause for the promise for the supplies not satisfying the request for the supplies if the promise for the supplies does not satisfy the request for the supplies;

if the promise for the supplies does not satisfy the request for the supplies, generate at the second entity a second constraint according to the culprit identified in the promise for the supplies; and

if the promise for the supplies does not satisfy the request for the supplies, reoptimize at the second entity the second entity's production associated with meeting the demand from the third entity using the second constraint generated according to the culprit identified in the promise for the supplies to generate a new request for the supplies.

2. (Previously presented) The system of Claim 1, wherein the system associated with the first entity is operable to repeat the following until the promise for the supplies satisfies the request for the supplies:

receiving a request for the supplies from the second entity;

reoptimizing the first entity's production of the supplies using the request for the supplies as a constraint to generate the promise for the supplies; and

communicating the promise for the supplies to the second entity.

3. (Previously presented) The system of Claim 1, further operable to repeat the following until the promise for the supplies satisfies the request for the supplies:

optimizing the second entity's production associated with meeting the demand from the third entity to generate a request for the supplies;

communicating the request for the supplies to the first entity;

receiving a promise for the supplies from the first entity based on the request for the supplies, the promise for the supplies having been generated according to an optimization of the first entity's production of the supplies using the request for the supplies as a first constraint, the promise for the supplies identifying a culprit as a cause for the promise for the supplies not satisfying the request for the supplies if the promise for the supplies does not satisfy the request for the supplies;

if the promise for the supplies does not satisfy the request for the supplies, generating a second constraint according to the culprit identified in the promise for the supplies; and

reoptimizing the second entity's production associated with meeting the demand from the third entity using the second constraint generated according to the culprit identified in the promise for the supplies to generate a new request for the supplies if the promise for the supplies does not satisfy the request for the supplies.

4. (Previously presented) The system of Claim 1, wherein:

the system associated with the first entity is further operable to optimize the first entity's production of the supplies independently of the second entity; and

the system associated with the second entity is further operable to optimize the second entity's production associated with meeting the demand from the third entity independently of the first entity.

5. (Previously presented) The system of Claim 1, wherein:

the request for the supplies comprises a first request for a first supply and a second request for a second supply; and

the promise for the supplies comprises a first promise for the first supply and a second promise for the second supply, the promise for the supplies identifying the second supply as the culprit if the promise for the supplies does not satisfy the request for the supplies.

6. (Previously presented) The system of Claim 5, wherein:

the second promise does not satisfy the second request for the second supply, the promise for the supplies identifying the second supply as the culprit; and

the system associated with the second entity is further operable to optimize the second entity's production associated with meeting the demand from the third entity to generate a new request for the supplies using the second promise for the second supply to generate the second constraint.

7. (Previously presented) The system of Claim 1, wherein:

the request for the supplies comprises a bundled request for at least two supplies for the second entity's production associated with meeting the demand from the third entity;

the promise for the supplies in response to the bundled request for the at least two supplies comprises a first promise, a second promise, and the culprit, the culprit identifying the second promise as the cause for the promise for the supplies not satisfying the bundled request for the at least two supplies; and

the system associated with the second entity is operable to reoptimize the second entity's production associated with meeting the demand from the third entity to generate a new request for the at least two supplies using the second promise to generate the second constraint.

8. (Previously presented) The system of Claim 1, wherein:

the promise for the supplies comprises an optimization objective and a promise constraint; and

the system associated with the second entity is operable to reoptimize the second entity's production associated with meeting the demand from the third entity to generate a new request for the supplies using the promise constraint and the optimization objective.

9. (Previously presented) The system of Claim 1, wherein the system associated with the second entity is operable to generate a request for the supplies in accordance with one or more internal resources.

10. (Previously presented) The system of Claim 1, wherein the system associated with the second entity is operable to communicate a demand promise associated with meeting the demand from the third party to the third entity if the promise for the supplies satisfies the request for the supplies.

11. (Currently amended) A computer-implemented method for optimizing a request-promise workflow, the method performed using a computer system comprising one or more processing units and one or more memory units, the method comprising:

using the computer system, establishing at an entity a demand for one or more supplies needed to meet a demand from a third party;

~~using the computer system, assuming that the supplies are unlimited;~~

using the computer system, optimizing at the entity, based at least in part on an assumption that the supplies are unlimited, the production associated with meeting the demand from the third party to generate a request for the supplies needed to meet the demand from the third party;

using the computer system, communicating the request for the supplies from the entity to a supplier of the supplies;

using the computer system, receiving at the entity a promise for the supplies from the supplier, the promise for the supplies having been generated according to an optimization of the supplier's production of the supplies using the request for the supplies as a first constraint, the promise for the supplies identifying a culprit as a cause for the promise for the supplies not satisfying the request for the supplies if the promise for the supplies does not satisfy the request for the supplies;

using the one or more computer systems, determining at the entity whether the promise for the supplies satisfies the request for the supplies; and

using the one or more computer systems, if the promise for the supplies does not satisfy the request for the supplies, generating at the entity a second constraint according to the culprit identified in the promise for the supplies and reoptimizing the production associated with meeting the demand from the third party using the second constraint generated according to the culprit identified in the promise for the supplies to generate a new request for the supplies for communication to the supplier.

12. (Previously presented) The method of Claim 11, further comprising repeating the following until the promise for the supplies satisfies the request for the supplies:

optimizing the production associated with meeting the demand from the third party to generate a request for the supplies needed to meet the demand from the third party;

communicating the request for the supplies to the supplier;

receiving a promise for the supplies from the supplier, the promise for the supplies identifying a culprit as a cause for the promise for the supplies not satisfying the request for the supplies if the promise for the supplies does not satisfy the request for the supplies;

determining whether the promise for the supplies satisfies the request for the supplies; and

if the promise for the supplies does not satisfy the request for the supplies, generating a constraint according to the culprit identified in the promise for the supplies and reoptimizing the production associated with meeting the demand from the third party in accordance with the constraint to generate a new request for the supplies for communication to the supplier.

13. (Previously presented) The method of Claim 11, wherein:

the request for the supplies comprises a first request for a first supply and a second request for a second supply; and

the promise for the supplies comprises a first promise for the first supply and a second promise for the second supply, the promise for the supplies identifying the second supply as the culprit identified in the promise for the supplies if the promise for the supplies does not satisfy the request for the supplies.

14. (Previously presented) The method of Claim 13, wherein:

the second promise does not satisfy the second request for the second supply, the promise for the supplies identifying the second supply as the culprit; and

reoptimizing the production associated with meeting the demand from the third party to generate a new request for the supplies further comprises using the second promise for the second supply to generate the constraint.

15. (Previously presented) The method of Claim 11, wherein:

the request for the supplies comprises a bundled request comprising a first request for a first supply and a second request for a second supply; and

the promise for the supplies comprises a first promise for the first supply, a second promise for the second supply, and the culprit, the culprit identifying the second promise for the second supply as the cause for the promise for the supplies not satisfying the bundled request.

16. (Previously presented) The method of Claim 15, wherein reoptimizing the production of the demand to generate a new request for the supplies further comprises using the second promise for the second supply to generate the constraint.

17. (Previously presented) The method of Claim 15, wherein the bundled request comprises the supplies required for meeting one unit of the demand from the third party.

18. (Previously presented) The method of Claim 11, wherein:

the promise for the supplies comprises an optimization objective and a promise constraint; and

reoptimizing the production associated with meeting the demand from the third party to generate a new request for the supplies further comprises reoptimizing using the promise constraint and the optimization objective.

19. (Previously presented) The method of Claim 11, wherein:

optimizing the production associated with meeting the demand from the third party to generate a request for the supplies needed to meet the demand from the third party further comprises generating the request for the supplies in accordance with one or more internal resources; and

reoptimizing the production associated with meeting the demand from the third party to generate a new request for the supplies further comprises generating the new request for the supplies in accordance with the one or more internal resources.

20. (Previously presented) The method of Claim 11, wherein determining whether the promise for the supplies satisfies the request for the supplies comprises determining whether the promise for the supplies falls within an acceptable range.

21. (Previously presented) The method of Claim 11, further comprising communicating a demand promise associated with meeting the demand from the third party to the third party if the promise for the supplies satisfies the request for the supplies.

22-47 (Canceled) Claims 22-47 are canceled without prejudice or disclaimer.